

IN THE ABSTRACT:

Please add an abstract as follows:

The invention relates to an apparatus and method for manufacturing molten irons. The method for manufacturing molten irons includes providing a mixture containing iron by drying and mixing iron ores and additives, passing the mixture containing iron through one or more successively-connected fluidized beds to convert the mixture into a reducing material that is reduced and calcined, forming a coal packed bed, which is a heat source in which the reducing material has been melted, charging the reducing material to the coal packed bed and supplying oxygen to the coal packed bed to manufacture molten irons, and supplying reducing gas exhausted from the coal packed bed to the fluidized bed. In the providing a mixture containing iron, exhaust gas exhausted from the fluidized bed is branched to dry at least one of the iron ores and the additives. The apparatus for manufacturing molten irons uses this method for manufacturing molten irons. Through the use of the invention, at least one of iron ores and additives is dried and conveyed to thereby enhance energy efficiency and minimize the amount of required equipment.